AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all previous claims in the application:

1. (Currently Amended) A computer system communicatively coupled to a network, comprising:

a programmable non-volatile memory;

at least one microprocessor operatively coupled to execute at least one instruction from the programmable non-volatile memory in response to a boot request, the microprocessor configured to controllably write to the programmable non-volatile memory; and

at least one fixed storage device operatively coupled to the at least one microprocessor, the fixed storage device containing a boot image that is configured with appropriate instruction code suited to transition the at least one microprocessor to an operational mode, wherein the at least one fixed storage device receives and stores a boot memory comprising:

a system loader;

a configuration file <u>including information that directs the microprocessor to one or more locations within one of the fixed storage devices and a random access memory</u>; and

a firmware patch configured to write a firmware upgrade to the programmable non-volatile memory, the firmware patch comprising:

an install application;

a firmware revision containing at least one instruction different from firmware within the programmable non-volatile memory; and

a flash application having a bootable kernel, firmware update logic, and a non-volatile memory interface, wherein the system loader instructs the microprocessor to write the firmware revision to the programmable non-volatile memory.

2. (Canceled)

3. (Canceled)

4. (Previously Presented) The computer system of claim 1, wherein the at least one fixed storage device receives and stores new firmware.

5. (Previously presented) The computer system of claim 1, wherein the at least one fixed storage device receives and stores an application.

6. (Previously presented) The computer system of claim 1,wherein the bootable kernel comprises a system loader interface and reboot logic.

7. (Previously Presented) The computer system of claim 6, wherein the bootable kernel comprises an operating system.

8. (Previously Presented) The computer system of claim 6, wherein the bootable kernel comprises file management system.

9. (Currently Amended) A computer network, comprising:

a plurality of computer systems communicatively coupled to a network infrastructure, each of the plurality of computer systems configured with a non-volatile memory containing a common firmware version designated for replacement and a fixed storage device containing a boot image having appropriate instruction code suited to transition the respective computer system to an operational mode;

a user input device communicatively coupled to at least one computer system communicatively coupled to the network infrastructure, the at least one computer system configured with write access permission for the respective fixed storage device associated with each of the plurality of computer systems, wherein an input from the user input device initiates a transfer of a patch memory map and a firmware upgrade patch to the plurality of computer systems, the firmware upgrade patch comprising a bootable kernel different from an operating system operable on the respective computer system, the patch memory map comprising information that directs a computer system to execute instructions stored at one or more locations.

10. (Previously Presented) The network of claim 9, wherein the firmware upgrade patch and the patch memory include instruction code necessary to support replacement of the common firmware version by each of the respective plurality of computer systems.

11. (Canceled)

12. (Previously Presented) The network of claim 9, wherein the firmware upgrade patch comprises an application that contains an operating system.

13. (Previously Presented) The network of claim 9, wherein the firmware upgrade patch comprises an application that contains a file management system.

14. (Currently Amended) A computer system communicatively coupled to a network, comprising:

means for accessing data stored on a memory device that retains data when power is removed from the memory device, the accessing means responsive to power being applied to the computer system; and

means for writing to the memory device in response to a remote input designated to initiate the replacement of the data stored on the memory device, wherein the new data to be stored, a configuration file, and a bootable kernel are stored on a fixed storage device within the computer system in response to the remote input, the bootable kernel comprising a system loader interface and reboot logic, the configuration file including information that directs the computer system to one or more locations within the memory device.

15. (Original) The computer system of claim 14, wherein the accessing means comprises a programmable non-volatile memory.

16. (Previously Presented) The computer system of claim 14, wherein the writing means further comprises:

means for storing an operating system and a file management system on the fixed storage device; and

means for modifying an initial system loader address in response to the remote input.

17. (Original) The computer system of claim 15, wherein the programmable non-volatile memory comprises an electrically erasable programmable read only memory.

18. (Currently Amended) A method for performing a firmware upgrade, comprising:

delivering a firmware install patch containing firmware, an install application, a configuration file, and a flash application to a boot disk within a plurality of networked computer systems each of said computer systems having a firmware version designated for the firmware upgrade, wherein the flash application comprises a bootable kernel, firmware update logic, and a non-volatile memory interface;

initiating an install application contained within the firmware install patch, said install application containing instructions suited to perform the firmware upgrade;

modifying an initial system loader in response to the install application to direct a microprocessor to execute instructions ~~from the boot image~~ identified by one or more memory locations identified within the configuration file upon a subsequent microprocessor reset input;

initiating a microprocessor reset input in response to the install application that loads a plurality of instructions in accordance with the boot image;

erasing the firmware within each of the plurality of networked computer systems in response to the install application; and

writing the new firmware to each of the plurality of networked computer systems in response to the install application.

19. (Original) The method of claim 18, wherein delivering a firmware install patch comprises a network data transfer.

20. (Previously Presented) The method of claim 18, wherein the delivered firmware install patch comprises a boot image that contains an operating system, a file manager, and at least one executable configured to verify the version of the firmware stored in the computer system prior to writing the new firmware.

21. (Previously Presented) The method of claim 18, further comprising:

installing an operating system that requires the new firmware;

installing a software patch that requires the new firmware;

redirecting the initial system loader to select the appropriate memory address upon subsequent microprocessor reset inputs to apply the upgraded firmware, operating system, and software patch; and

removing the firmware install patch from the computer system.

22-26. (Canceled)

27. (Currently Amended) A computer system communicatively coupled to a network, comprising:

a programmable non-volatile memory having a first firmware;

at least one microprocessor operatively coupled to controllably write to the programmable non-volatile memory and execute at least one instruction from the programmable non-volatile memory in response to a boot request; and

at least one fixed storage device operatively coupled to the at least one microprocessor, the storage device containing a firmware patch comprising:

a patch memory map comprising an index that identifies the location of and directs the computer system to execute instructions stored at one or more locations, the instructions forming:

an install application;

a second firmware different from the first firmware; and

a flash application comprising:

a bootable kernel including a system loader interface and reboot logic;

a firmware update logic; and

a non-volatile memory interface, wherein the flash

application instructs a system loader via the system loader interface to select the bootable kernel upon receipt of a boot request.

28. (Previously Presented) The computer system of claim 27, wherein a system loader executes the flash application.

29. (Previously Presented) The computer system of claim 27, wherein the firmware update logic and the non-volatile memory interface store the second firmware on the non-volatile memory.

30. (Canceled)

31. (Currently Amended) The computer system of claim ~~30~~ 27, wherein upon the occurrence of the boot request, the new firmware and system loader transfer an operating system to a random access memory communicatively coupled to the at least one microprocessor.

32. (Currently Amended) The computer system of claim ~~30~~ 27, wherein the install application executes a file system operation.

33. (Previously Presented) The computer system of claim 32, wherein the file system operation results in the removal of the firmware patch from the at least one fixed storage device.